AN ASPECT OF STRESS PATTERNS IN PHONEMIC CLAUSES

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英語の音素的節における強勢型の一特徴

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The word "aspect" used here is not the same as that which is used in expressing the time of verb, such as durative aspect, iterative aspect and so on. It only means one phase. "Stress" has been generally called "accent," but the latter word is used rather loosely, and here in this study, to meet the strict definition, stress is treated as consisting of four stress phonemes, to which many structural linguists agree. The four stress phonemes are "Primary", "Secondary", "Tertiary", and "Weak" stress.

Speaking of "stress pattern," stress morpheme can be thought of usually; for example, the stress morpheme of "White House," which is the residence of the President of the U.S., is "White House," and that of "white house," which means a house of white color, is "white house." That is to say, the stress morpheme consisting of primary stress, plus juncture and tertiary stress, is the stress morpheme indicating "compound."

This study, however, does not engage in finding such stress morpheme as has been explained above, but in making clear at what point stress phonemes, especially primary stress, occur.

"Phonemic clause" is the unit ranking in the fifth stage of sentence analysis. The explanation illustrated is as follows:

5), 6), 7) G. L. Trager & H. L. Smith: ibid. 1.73.
8) A. A. Hill: ibid. 7.6.
9) G. L. Trager & H. L. Smith: ibid. 1.72.
of a phonemic clause are; to have only one terminal juncture at its end and to have only one primary stress. The terminal junctures consist of three members; that is, upturn, level and downturn, shown by /u/, /#/ and /\/. These terminal juncture phonemes are easily distinguished at the end of utterance, when there is a pause. However, they are found to occur even though there is no real pause, or, in other words, there is no interruption of sound, where the preceding segmental phoneme is prolonged, resulting in making the hearer think that the pause occurs. The feature quoted above was made clear by the experiment of American scholars such as Stockwell.

The aim of this study is, as has been said before, to reveal the relationship between primary stress and those eight parts of speech of orthodox grammarians; that is, to see at what position primary stress does occur in a phonemic clause which is one of the stages of sentence analysis from the structural linguistical point of view. To speak in plain language, the problem in question is where to put primary stress in the unit of utterance, when speaking English.

The unit defined here is the part from one terminal juncture or a pause to the other terminal juncture.

The material for this analysis is the Linguaphone records, British course, the contents of which are about one hour long. The absolute loudness or intensity of primary stress is of course different among the speakers, and furthermore, some people are remarkable in their speaking attitude because their four stresses are easily distinguished, and some are not so remarkable in differentiating four stresses. The standard of distinguishing primary stress can be got by pronouncing one syllable word alone such as “yes.” The loudness or intensity occurring in this instance is primary stress.

The phonemic clauses in this study amount to 2346. Some words were mentioned about “phonemic word” earlier in this thesis. It is the part bordered by at least one plus juncture; for example, in “I don’t know,” /aj+down+now/, “I,” “don’t,” or “know” is the phonemic word respectively. 1877 out of 2346 phonemic clauses have primary stress on their last phonemic word. Those with no primary stress on their last phonemic word are 469. In these 1877 examples, however, the cases occur where one phonemic word is the only one constituent of a phonemic clause, and then they must be excluded. For instance, “Good” is sure to have primary stress because it consists of only one phonemic word /gud/, and necessarily is the last one in the phonemic clause. The examples, such a case omitted, number 1393, and

10) A. A. Hill: *ibid.* 2.3.
12) A. A. Hill: *ibid.* 2.3.
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these 1393 examples are available for the analysis.

Further investigation of those phonemic clauses which have no primary stress on the last phonemic word, made in relation to the eight parts of speech, gives the following diagram.

<table>
<thead>
<tr>
<th></th>
<th>With primary stress</th>
<th>With no primary stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noun</td>
<td>236 (instances)</td>
<td>171 (instances)</td>
</tr>
<tr>
<td>Pronoun</td>
<td>47</td>
<td>177</td>
</tr>
<tr>
<td>Verb</td>
<td>200</td>
<td>38</td>
</tr>
<tr>
<td>Adjective</td>
<td>167</td>
<td>9</td>
</tr>
<tr>
<td>Adverb</td>
<td>172</td>
<td>36</td>
</tr>
<tr>
<td>Preposition</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Conjunction</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Interjection</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Dr. Jones says in his book *The Pronunciation of English*\(^{14}\) that the words on which stress is usually put are noun, adjective, demonstrative pronoun, adverb and principal verb. But the fact must be admitted that "stress" used in his book does not correspond to that of phonemic sense, and the distinction between primary stress and secondary stress is not drawn clearly, and then strictly speaking, his analysis is based upon the different data from my own.

Dr. Jones' comments on the usually stressed words are not stable because he adds that there is no setting up such-and-such rule clearly concerning the stress. It seems that such is the characteristic of stress and no one can give light on the relationship between stress and eight parts of speech. But we may get to the core of this question, if the analysis is made in a new viewpoint.

My hypothesis is that "Primary stress" is put on the last phonemic word in a phonemic clause. And this hypothesis is examined for each part of speech.

As for noun, there are 171 instances out of 407, which have no primary stress, in spite of the noun being the last phonemic word. The first condition of the hypothesis to get rid of this seeming inconsistency is that "When more than one phonemic word can be treated as one unit morphologically and semantically at once, these phonemic words are thought to be one unit." This is the case of compound, its morphemic side taken in consideration.

My second condition proposed is to take pitch phonemes in consideration in analysing an utterance, which rank in the same layer as stress phonemes. That is to say, primary stress always occurs with any one of three patterns of pitch phonemes, such as (a)/\(\text{31}\)/; /\(\text{51}\)/ (b)/\(\text{21}\)/ if it is not followed by any one of terminal junctures, and (c)/\(\text{32}\)/. These two conditions were testified to be sufficient for the hypothesis with regard to primary stress, concerning the nouns. For pronouns except

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demonstrative pronouns, the condition '2a' is available. For verbs and adjectives, '2. a, b, c' are available.

There is no instance appearing in my investigation which has primary stress on preposition. Interjections are inferred to have primary stress.

As for pronouns, the instances without primary stress though their positions are the last amount to 177 among 224 examples. The demonstrative pronouns such as this, that, these and those have primary stress throughout all the examples, numbering 21. Therefore, excluding these demonstrative pronouns, the number 203 can be got, and 177 cases out of 224 are those with primary stress, and this is a rather high percentage of primary stress occurring. Dr. Jones says in his book to that a pitch sequence just like that of /31/ is used for emphasizing contrast. From this point of view, /31/ is now regarded as the morpheme of contrast. The pronouns except demonstrative pronouns always occur with the pitch phonemes /31/, when they do not accompany any terminal junctures, that is, when they are not positioned at the end of a phonemic clause. Concerning the pronouns except demonstrative pronouns (1) there are only a few of them which have primary stress in spite of their occurring at the end of a phonemic clause, (2) the conditions available for nouns, verbs and adjectives, that is, pitch phonemes, are not available, and (3) primary stress must occur either with any of terminal junctures or with /31/ that emphasizes contrast. Judging from these facts mentioned above, the pronouns except demonstrative pronouns are regarded as having no primary stress usually. It is found that the case happens where is a primary stress on the last-positioned pronoun and this must be justified. In the instance above quoted the pronoun in question occurs with any one of three pitch sequences, /31/, /21/, and /13/.

As to adverbs, just like the problem between demonstrative pronouns and the other pronouns, there are two cases; that is, (1) those which can be definable by the conditions available for verbs and adjectives, and (2) those which cannot be definable by them. Those of the latter case, (2), are the adverbs having the same combination of segmental phonemes as of the prepositions equivalent to them. The adverbs ending with /li/, and "not" are included in the former case, (1). "Over," "off," "out" and "by" are the members of the latter (2), and these can be definable in the same way as in the pronouns except demonstrative pronouns.

To sum up,

1. As to nouns, verbs, adjectives, demonstrative pronouns and most adverbs, they have primary stress when they occur at the end of a phonemic clause.

2. Primary stress occurs with any one of (1) /31/, (2) /21/, and (3) /32/, if it does not occur with the noun, verb, adjective, demonstrative pronoun, or adverb of the group 1, at the end of a phonemic clause.

15) D. Jones: ibid. § 452.
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3. As for nouns, however, the unit "compound" is set up and it must be treated as the equivalent to one phonemic word, with regard to primary stress.

4. The pronouns except demonstrative pronouns and adverbs such as *over*, *off*, *up*, *out* and *by*, prepositions, and conjunctions do not have primary stress.

5. However, the pronouns except demonstrative pronouns have primary stress if they occur with */31/, */21/, or */13/ and any one of terminal junctures at once.

6. When not together with any one of terminal junctures, the pronouns except demonstrative pronouns have primary stress if there is */31/.

7. Adverbs of group 2 have primary stress if they occur with either of */31/ or */21/, and terminal junctures are not the conditioning factor in this case.

8. Prepositions and conjunctions do not usually have primary stress.

9. Interjections have primary stress.

Bibliography


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